UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,448	03/26/2001	H. Craig Dees	PHO-120	2388

7590 08/25/2005

Edward D. Manzo, Esq.
COOK, ALEX, MCFARRON, MANZO
CUMMINGS & MEHLER, LTD.
200 West Adams St., Suite 2850
Chicago, IL 60606

EXAMINER	
GABEL, GAILENE	

ART UNIT	PAPER NUMBER
1641	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/817,448	DEES ET AL.	
	Examiner	Art Unit	
	Gailene R. Gabel	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,11-14,16-18,20-23,25-31,36-40 and 46-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,11-14,16-18,20-23,25-31,36-40 and 46-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/14,5/16,6/8,2005*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Amendment Entry

1. Applicant's amendment and response filed June 8, 2005 is acknowledged and has been entered. The specification at page 9 has been amended. Claims 1, 3, 16, 18, 22, 23, 29, 31, 46, 47, and 50 have been amended. Claims 4, 5, 19, 24, 32, and 33 have been cancelled. Accordingly, claims 1-3, 11-14, 16-18, 20-23, 25-31, 36-40, and 46-50 are pending and are under examination.

Specification

2. The amendment filed June 8, 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "halogenated xanthenes of the present invention do not contain a radioisotope and are not radioactive."

Applicant is required to cancel the new matter in the reply to this Office Action.

Withdrawn Rejections

3. All rejections not reiterated herein have been withdrawn.

4. Rejections of claims 4, 5, 19, 24, 32, and 33 are now moot in light of Applicant's cancellation of the claims.

5. In light of Applicant's submission of terminal disclaimers to obviate double patenting rejections over ASN 10/331,854 and US Patent 6,331,286, the ODP rejections over ASN 10/331,854 and US Patent 6,331,286, are hereby, withdrawn.

6. In light of Applicant's amendment, the rejection of claims 1-3, 11-14, 16-18, 20-23, 25-31, 36-40, and 46-50 under 35 U.S.C. 102(b) as being anticipated Dees et al. (US Patent 6,331,286), is hereby, withdrawn.

7. In light of Applicant's amendment, the rejection of claims 1, 3, 16, 18, 29, 31, 36-38, 46, 47, and 50 under 35 U.S.C. 102(b) as being anticipated by Johansson (Svensk Farmaceutisk Tidskrift (1973) 77 (13): 641-647 (Abstract), is hereby, withdrawn.

8. In light of Applicant's amendment, the rejection of claims 1, 3, 16, 18, 29, 31, 36-38, 46, 47, and 50 under 35 U.S.C. 102(b) as being anticipated by Crounse et al. (US Patent 4,647,578), is hereby, withdrawn.

9. In light of Applicant's amendment and arguments, the rejection of claims 2, 12, 14, 20, 30, 39, and 48 under 35 U.S.C. 103(a) as being unpantentable over Johansson (Svensk Farmaceutisk Tidskrift (1973) 77 (13): 641-647 (Abstract) or Crounse et al. (US Patent 4,647,578) in view of Neckers D. (Journal of Photochemistry and Photobiology, A: Chemistry 47: 1-29 (1989)), is hereby, withdrawn.

10. In light of Applicant's amendment and arguments, the rejection of claims 11, 13, 17, 21, 39, 40, and 49 under 35 U.S.C. 103(a) as being unpatentable over Johansson

(Svensk Farmaceutisk Tidskrift (1973) 77 (13): 641-647 (Abstract) or Crounse et al. (US Patent 4,647,578) in view of Neckers D. (Journal of Photochemistry and Photobiology, A: Chemistry 47: 1-29 (1989) and in further view of Khaw et al. (US 5,780,052), is hereby withdrawn.

Maintained Rejections

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 16-18, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16 and 18 provide for the use of a halogenated xanthene, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 16-18, 20, and 21 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App.

1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

New Grounds of Rejections

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1-3, 11-14, 16-18, 20-23, 25-31, 36-40, and 46-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

A) The specification does not appear to provide literal or adequate descriptive support for the recitation of "said halogenated xanthene does not contain a radioisotope". This is a recitation of a negative limitation excluding radioisotope within the realm of the recited halogenated xanthene but the specification does not provide teaching or disclosure for the recitation of a negative limitation in the claims excluding a radioisotope. Guidance for the specific exclusion of a radioisotope is not taught, the recitation of the negative limitation, "does not contain a radioisotope" is therefore not supported or disclosed in the instant specification.

B) The specification also does not appear to provide literal or adequate descriptive support for the recitation of "said composition does not contain liposomes". This is a recitation of a negative limitation excluding liposomes from the recited composition but the specification does not provide teaching or disclosure for the recitation of a negative limitation in the claims excluding liposomes. Guidance for specific exclusion of liposomes is not taught, the recitation of the negative limitation, "said composition does not contain liposomes" is therefore not supported or disclosed in the instant specification.

Since the limitations discussed supra lack antecedent basis in the specification, do not flow from the teaching of Applicant's disclosure, and none of the originally filed claims recited the above limitations in question, they are considered to constitute new matter. See In re ANDERSON, 176 USPQ 331 (CCPA 1973).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, 11-14, 16, 17, 20, 21, 29, 36-40, and 46-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Heitz et al. (US Patent 4,846,789).

Heitz et al. disclose halogenated xanthene dyes, which are administered to warm blooded animals and incorporated into infected tissue for activation by electromagnetic radiation (see Abstract and Figure 5). According to Heitz et al., the halogenated xanthene dyes may absorb radiation at wavelengths outside of the visible spectrum including near infrared, and near to far ultraviolet spectrum (see column 3, lines 40-44). Heitz et al. teach that fluorescein derivatives having one or more substituents in the 4, 5, 6, 7, 2', 4', 5', and 7' positions selected from the group consisting of F, Cl, Br, with xanthene dyes including erythrosin B, phloxin B, eosin, and Rose Bengal are especially important (see column 4, lines 12-31). These halogenated xanthene dyes are incorporated into pharmaceutical delivery vehicles such as capsules or pellets for oral administration.

In as far as the recitation of "using applied ionizing radiation having an energy greater than approximately 1 keV" and "for treatment of diseases...", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 2, 22, 25-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitz et al. (US Patent 4,846,789).

Heitz et al. has been discussed supra. Heitz et al. differ from the instant invention in failing to teach applying ionizing radiation having an energy less than approximately 1000 MeV (claim 14) or alternatively, greater than approximately 1 KeV (claim 22). Heitz et al. also differ from the instant invention in failing to teach "0.001% to less than about 20% concentration".

However, different levels of ionizing radiation applied upon different halogenated xanthene dyes, and concentration levels of the halogenated xanthenes, constitute result

effective variables which have been shown may be altered depending on how xanthene is used or the tissue being treated in order to achieve optimum results. It has long been settled to be no more than routine experimentation for one of ordinary skill in the art to discover an optimum value of a result effective variable. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum of workable ranges by routine experimentation." Application of Aller, 220 F.2d 454, 456, 105 USPQ 233, 235-236 (C.C.P.A. 1955). "No invention is involved in discovering optimum ranges of a process by routine experimentation." Id. at 458, 105 USPQ at 236-237. The "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." Application of Boesch, 617 F.2d 272, 276, 205 USPQ 215, 218-219 (C.C.P.A. 1980). Since Applicant has not disclosed that the values recited in instant claims 22, 27, and 30 are for any particular purpose or solve any stated problem and prior art has shown that concentrations often vary according to use and purpose of the compound, absent unexpected results, it would have been obvious for one of ordinary skill to discover the optimum workable ranges of the ionizing radiation levels disclosed by the prior art by normal optimization procedures.

15. Claims 3, 18, 23, 31, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson (Svensk Farmaceutisk Tidskrift (1973) 77 (13): 641-647 (Abstract) or Crounse et al. (US Patent 4,647,578).

Johansson teaches analysis and purification of Rose Bengal Sodium for use as reference substance and in pharmaceutical preparations (pharmaceutical delivery vehicle). According to Johansson, the Rose Bengal Sodium is sufficiently pure for the International Pharmacopeia, 1971. Johansson teaches a combination of recrystallization and iodination procedure to produce the compound. See Abstract.

Crounse et al. disclose that soluble sodium or potassium salts of halogenated xanthene dyes include erythrosin B, phloxin B, and Rose Bengal and are known to have photodynamic activity. According to Crounse et al., these compounds have utility in foodstuffs and in pharmaceutical applications, i.e. with specific pharmaceutical delivery vehicle, because they are essentially non-toxic to mammals and are safe for human consumption or treatment (see columns 3 and 4). Crounse et al. incorporate the compounds into aqueous solutions and dispersions (see Abstract).

Johansson and Crounse are silent in teaching that the halogenated xanthenes such as Rose Bengal, erythrosin B, and phloxin B are in disodium forms. However, disodium forms of Rose Bengal, erythrosine B, and phloxin B appear to be obvious variations of the halogenated xanthenes well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to substitute disodium forms of Rose Bengal or other halogenated xanthenes into the teaching of Johansson or Crounse because disodium counterparts or forms thereof, are obvious variations of halogenated xanthene species known in the art.

In as far as the recitation of "using applied ionizing radiation having an energy greater than approximately 1 keV" and "for treatment of diseases...", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Johansson and Crouse et al. also differ from the instant invention in failing to teach applying ionizing radiation having an energy greater than approximately 1 KeV as in the method of claim 23.

However, different levels of ionizing radiation applied upon different halogenated xanthene dyes, constitute result effective variables which have been shown may be altered depending on how xanthene is used or the tissue being treated in order to achieve optimum results. It has long been settled to be no more than routine experimentation for one of ordinary skill in the art to discover an optimum value of a result effective variable. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum of workable ranges by routine experimentation." Application of Aller, 220 F.2d 454, 456, 105 USPQ 233, 235-236 (C.C.P.A. 1955). "No invention is involved in discovering optimum ranges of a process by routine experimentation." Id. at 458, 105 USPQ at 236-237. The "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." Application of Boesch, 617 F.2d 272, 276, 205 USPQ 215, 218-219

(C.C.P.A. 1980). Since Applicant has not disclosed that the values recited in instant claim 23 are for any particular purpose or solve any stated problem and prior art has shown that concentrations often vary according to use and purpose of the compound, absent unexpected results, it would have been obvious for one of ordinary skill to discover the optimum workable ranges of the ionizing radiation levels disclosed by the prior art by normal optimization procedures.

Response to Arguments

16. Applicant's arguments filed June 8, 2005 which pertain to amended claims have been considered but are moot in view of the new grounds of rejection.

17. Applicant's arguments filed June 8, 2005 which pertain to amended claims have been considered but are moot in view of the new grounds of rejection.

A) Applicant argues that the recitation of "halogenated xanthene does not contain a radioisotope" is not new matter; thus, the amendment to the specification incorporating such language should be entered. Applicant specifically contends that the recitation is not new matter because discussion in the specification of the invention provides, 1) radiosensitizers as non-toxic in the absence of applied ionizing radiation; hence, they should not be radioactive and cannot contain any radioisotopes; 2) radiosensitizers that function to absorb light, not emit light; 3) molecular weights of the radiosensitizers as excluding radioisotopes; 4) molecular structures of the

radiosensitizers as excluding radioisotopes; and 5) exclusion of radioisotopes in any of the chemical formula of the halogenated xanthenes.

In response, Applicant's argument is not persuasive because the specification lacks adequate descriptive support for the recitation of "said halogenated xanthene does not contain a radioisotope". This is a recitation of a negative limitation excluding radioisotope within the realm of the recited halogenated xanthene but the specification does not provide teaching or disclosure for the recitation of this negative limitation in the claims excluding a radioisotope. There is no guidance leading to the specific exclusion of a radioisotope in the specification. Since the limitations discussed lack antecedent basis in the specification, do not flow from the teaching of Applicant's disclosure, and none of the originally filed claims recited the above limitations in question, they are considered to constitute new matter. See In re ANDERSON, 176 USPQ 331 (CCPA 1973). The mere absence of an element from a claimed structure is not consonant to requiring its exclusion from the structure. Accordingly, the new matter rejection is not being maintained.

B) Applicant argues that the rejection of claims 16-21 under 35 USC 112, second paragraph as being indefinite, and under 35 USC 101 as reciting use without reciting any steps, should be withdrawn because claims 16 and 18 have been amended to recite, "wherein said halogenated xanthene is added to said pharmaceutical delivery"; hence, claims 16 and 18 recite a method step.

In response, Applicant's argument is not persuasive because claims 16 and 18, as amended, do not appear to recite positive and active method steps in the claim.

C) Applicant argues that Johansson and Crounse do not suggest the claimed invention, as amended, because their halogenated xanthenes are now limited to those having disodium salts.

In response, the teaching of halogenated xanthene derivatives having disodium salts appear to be obvious variations of halogenated xanthenes which are conventional and well known in the art. Accordingly, Johansson and Crounse are deemed to suggest the claimed invention.

D) Applicant argues that Johansson and Crounse do not disclose the recited use of the claimed compositions. Applicant specifically contends that the issue of use with radiosensitization for purpose of medicament is not taught nor suggested by both of Johansson and Crounse.

In response, Johansson and Crounse suggest obvious variations of species of halogenated xanthenes. Alternatively, the recitation of "using applied ionizing radiation having an energy greater than approximately 1 keV" and "for treatment of diseases...", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576,

152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

E) Applicant argues that Heitz does not disclose or suggest the claimed invention because Heitz does not teach 4,5,6,7-Tetrabromoerythrosin nor design it for use in a pharmaceutical composition for treatment of diseases. Applicant contends that the halogenated xanthenes as taught by Heitz are for pesticidal use instead (killing intestinal parasites), and there is no teaching in the reference that suggests their use as an injectable (sterile) radiosensitizer pharmaceutical composition for application with ionizing radiation.

In response, Heitz et al. teach halogenated xanthene dyes which are fluorescein derivatives having one or more substituents in the 4, 5, 6, 7, 2', 4', 5', and 7' positions selected from the group consisting of F, Cl, Br, with xanthene dyes including erythrosin B, phloxin B, eosin, and Rose Bengal. The compositions are administered to warm blooded animals and incorporated into infected tissue for activation by electromagnetic radiation. These halogenated xanthene dyes are incorporated into pharmaceutical delivery vehicles such as capsules or pellets for oral administration. These halogenated xanthenes encompass most if not all derivatives recited in claims 1, 29, 46, and 47; hence, Heitz deemed to anticipate the claimed invention.

In as far as the recitation of "using applied ionizing radiation having an energy greater than approximately 1 keV" and "for treatment of diseases...", a recitation of the intended use of the claimed invention must result in a structural difference between the

claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

18. No claims are allowed.

19. Applicant's submission of the requirements for the joint research agreement prior art exclusion under 35 U.S.C. 103(c) on June 8, 2005 prompted the new grounds of rejection under 37 CFR 1.109(b) presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.02(l)(3). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gailene R. Gabel whose telephone number is (571) 272-0820. The examiner can normally be reached on Monday, Tuesday, and Thursday, 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gailene R. Gabel
Patent Examiner
Art Unit 1641
August 19, 2005

LONG V. LE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600
08/22/05